

-- APPLICATION OF LIMITATIONS OF COPIED CLAIMS
TO APPLICANTS' DISCLOSURE

In reply to the Examiner's requirement "to specifically apply each limitation or element of each of the copied claims to the disclosure of the application," immediately below, Applicants have presented claims 1-26 (corresponding to claims 1, 2, 4-15, 17-22, 24, 31, 32, and 34-36 of U.S. Patent No. 5, 797,610) and, within the text of these claims, Applicants have inserted, within brackets, reference numerals which correspond to Applicants' drawings and/or explanatory comments.

1. [Patent Claim 1] A ventilated sport shoe [4/5; 4A/5A; 5B; 5C; 5D] ^{including} capable of being mounted on a lower frame [2] mounting a bearing member [3], wherein the ventilated sport shoe comprises:

an upper shoe portion [4/5; 4A/5A; 5B; 5C; 5D] defining an interior adapted to receive a foot; and

a foot bed including a base [6; 6A; 6B; 6C; 6D] secured to the upper shoe portion, the foot bed defining an upper surface [6b, e.g.] capable of receiving the foot and the base defining a lower surface [6a, e.g.] capable of mounting the lower frame [2] thereon, the foot bed defining a ventilation channel [8; 8B; 8C; 8D] formed within or below the upper surface of the foot bed and at least partially traversing the foot bed from an inlet aperture [11; 11A; 11B; 11C; 11D] defined on an exterior of the lower surface of the base to an outlet aperture [19] defined on the exterior of the lower surface of the base, the apertures providing ambient airflow into and out of the foot bed from the exterior of the base during use, wherein the ventilation

channel is in moisture transport communication [via holes 12, e.g.] with the interior of the upper shoe portion, thereby providing ventilation and moisture transfer from the received foot to the channel and out of the outlet aperture. [Regarding the outlet aperture 19, although it is depicted only in Fig. 1, regarding the embodiment of Figs. 1-4, Applicants had contemplated that all of their embodiments would possibly include same, as evidenced by the comments made on page 7, line 19, to page 8, line 2: "Alternative embodiments based on the principle that has just been described are shown in FIGS. 5-9. * * * The principle includes, for example, the provision of ... the plug or closure valve 19 for modifying the air flow rate of the ventilating air that exits the boot."]

2. [Patent Claim 2] The ventilated sport shoe of claim 1, wherein the upper shoe portion is configured for ventilation of upper portions of the foot. [This limitation appears to be inherently encompassed by Applicants' disclosure; note arrows A in the figures and the fact that there would be no structure that would block ventilation of upper portions of the foot. Also, the upper center of the rigid shell 5 of the boot, shown in Fig. 1 would facilitate ventilation of the upper center of the boot or liner therewithin. Further, Fig. 5 depicts a boot with a lacing across a central longitudinal opening, providing another example of ventilation of upper portions of the foot.]

3. [Patent Claim 4] The ventilated sport shoe of claim 1, wherein the inlet aperture [11; 11A; 11B; 11C; 11D] is defined by the base [6; 6A; 6B; 6C; 6D] and is longitudinally spaced from the outlet aperture [19] relative to a longitudinal axis of the base.

4. [Patent Claim 5] The ventilated sport shoe of claim 3, wherein the inlet aperture [11; 11A; 11B; 11C; 11D] is defined adjacent a toe portion of the base and the outlet aperture [19] is defined adjacent a heel portion of the base.

5. [Patent Claim 6] The ventilated sport shoe of claim 4, wherein the inlet [11; 11A; 11B; 11C; 11D] and outlet apertures [19] and the ventilation channel [8] are configured to provide continuous airflow therebetween for the length of the sport shoe, thereby providing ventilation and moisture transfer for substantially the entire length of the foot.

6. [Patent Claim 7] The ventilated sport shoe of claim 4, further comprising at least one branch ventilation channel extending from a branch inlet aperture, defined on the exterior of the base between the toe portion and the heel portion, rearwardly to join the ventilation channel. [The subject matter of this claim is encompassed by a non-illustrated embodiment of Applicants' invention, described on page 6, lines 6-7: "This air inlet (i.e., inlet 11) could be lateral, or could even be combined with a plurality of front and/or lateral inlets."]

7. [Patent Claim 8] The ventilated sport shoe of claim 6, further comprising a plurality of branch ventilation channels. [Support is found on page 6, lines 6-7, as mentioned above regarding claim 6.]

8. [Patent Claim 9] The ventilated sport shoe of claim 1, wherein the lower surface of the base [6; 6A; 6B; 6C; 6D] defines a projection projecting downwardly from the lower

surface, the inlet ventilation aperture [11; 11A; 11B; 11C; 11D] being defined within the projection.

9. [Patent Claim 10] The ventilated sport shoe of claim 8, wherein the inlet ventilation aperture [11; 11A; 11B; 11C; 11D] is disposed on a forward face of the projection, such that the forward face is oriented towards a toe portion of the base.

10. [Patent Claim 11] The ventilated sport shoe of claim 9, wherein the inlet ventilation aperture [11; 11A; 11B; 11C; 11D] is positioned normal to the freestream airflow through the ventilation channel, thereby drawing airflow through the channel. [The Examiner's concern about claim 6, mentioned on the first page of his communication, might arise from an inadvertent misunderstanding. Just as the patentees explain, in column 3, lines 42-43, that their inlet apertures 32 are "oriented substantially normal to the airflow when the skate 10 is in use," Applicants describe, on page 6, line 7-11, that "this air inlet is positioned on a surface of the skate arranged perpendicularly to the direction of displacement, such that the draft generated by the displacement of the skate rushes directly into the ventilation chamber." See, also, page 7, lines 13-14: "the air inlet extends directly perpendicularly to the flow of the moving draft."]

11. [Patent Claim 12] The ventilated sport shoe of claim 1, wherein the ventilation channel [8] comprises a plurality of channels [14, 15; 22, 23, 24, 25, ...] at least partially traversing the upper surface of the foot bed providing airflow into and out of the foot bed for corresponding portions of the foot bed during use.

12. [Patent Claim 13] The ventilated sport shoe of claim 11, wherein the plurality of ventilation channels [14, 15; 22, 23, 24, 25, ...] are arranged to ventilate at least a majority of the upper surface of the foot bed. [Regarding the ventilation of a "majority of the upper surface of the foot bed, the drawings provide ample support. Of course, as seen in Figs. 1, 2, 4-9, it can be seen that air flows along the entire length of the boot and, as seen in Figs. 2, 4, 5, 6a, 8a, 9a, it can be seen that air flows along the entire width of the sole.]

13. [Patent Claim 14] The ventilated sport shoe of claim 11, wherein the plurality of channels [14, 15; 22, 23, 24, 25, ...] are disposed substantially parallel to a longitudinal axis of the foot bed.

14. [Patent Claim 15] The ventilated sport shoe of claim 11, wherein the plurality of channels [14, 15; 22, 23, 24, 25, ...] are arranged over or within substantially the entire width of the upper surface of the foot bed. [As noted in connection with claim 12, note Figs. 2, 4, 5, 6a, 8a, 9a, where it can be seen that air flows along the entire width of the sole.]

15. [Patent Claim 17] The ventilated sport shoe of claim 1, wherein the ventilation channel [14, 15; 22, 23, 24, 25, ...] is configured for at least a portion of its length as a groove formed in the upper surface of the base. [Also, see Fig. 2, the portion of the channels 14, 15 formed by lower surfaces 6a, and see Fig. 8a, where ribs 21 extend upwardly from the sole 6C, as mentioned on page 9, lines 4-10.]

16. [Patent Claim 18] The ventilated sport shoe of claim 1, wherein the ventilated sport shoe [4/5; 4A/5A; 5B; 5C; 5D] is adapted for use as an in-line skate shoe, further comprising said lower frame [2] secured to the base [6; 6A; 6B; 6C; 6D] and a plurality of longitudinally aligned wheels [3] mounted on the lower frame [2].

17. [Patent Claim 19] The ventilated sport shoe of claim 1, wherein the ventilation channel [8C] is defined in the base [6C] and the foot bed further comprises a substrate [9C] received within the upper shoe portion between an upper surface of the base and a user's foot, the substrate defining a plurality of moisture transport pathways [12] in fluid communication with the ventilation channel [8C].

18. [Patent Claim 20] The ventilated sport shoe of claim 17, wherein the substrate [9C] comprises a last board received on the upper surface of the base and joining the upper shoe portion to the base. [As explained on page 9, lines 4-10 of Applicants' specification, the plantar support 9C (i.e., "substrate") is positioned on the top (i.e., "upper surface of") the sole 6C (i.e., "base"). Applicants' plantar support 9C is much like the patentees' "last board" 54, shown in their Fig. 2, which is positioned on ribs 29.]

19. [Patent Claim 21] The ventilated sport shoe of claim 18, wherein the last board [9C] defines a plurality of apertures [12] vertically extending therethrough at least partially aligned and in fluid communication with the ventilation channel [8C; 22, 23, 24, 25, ...].

20. [Patent Claim 22] The ventilated sport shoe of claim 18, wherein the substrate further comprises an insole received within the interior of the upper shoe portion over the last board. **[As known to persons skilled in the art, as well as persons not skilled in the art, a boot includes an insole, upon which one's foot is in direct contact.]**

21. [Patent Claim 24] The ventilated sport shoe of claim 20, wherein the insole defines a plurality of apertures vertically extending therethrough. **[Consistent with the object of the invention, any insole would include apertures so that ventilation is not impeded.]**

22. [Patent Claim 31] An in-line skate [see, e.g., Figs. 1 and 5] including a plurality of wheels [3], comprising:

an upper shoe portion [4/5; 4A/5A; 5B; 5C; 5D] defining an interior adapted to surround a user's foot;

a foot bed including a base [6; 6A; 6B; 6C; 6D] secured to the upper shoe portion, the foot bed having an upper surface [6b, e.g.] that supports the user's foot and the base having an exterior surface, wherein the base defines inlet [11; 11A; 11B; 11C; 11D] and outlet [19] ventilation apertures on the exterior surface of the base, and the foot bed defines a channel [8; 8B; 8C; 8D] extending from the inlet to the outlet aperture and at least partially along the upper surface of the foot bed to provide ambient airflow into and out of the foot bed from the exterior of the base during use;

moisture transport means **[clearly, such means is embodied by various structure disclosed in Applicants' application, such as the inlet 11, air channel 8, apertures 12, etc.]**

for placing the channel in moisture transport communication with the interior of the upper shoe portion [4/5; 4A/5A; 5B; 5C; 5D], such that motion of the skater during use causes airflow from the inlet aperture through the channel to the outlet aperture to draw moisture from the interior of the skate; and

a frame [2] for mounting the plurality of wheels [3] secured to the exterior of the base.

23. [Patent Claim 32] A ventilated sport shoe base having an upper shoe portion [4/5; 4A/5A; 5B; 5C; 5D] adapted to receive a foot and a lower load-bearing surface [2], wherein the ventilated sport shoe comprises:

a base [6; 6A; 6B; 6C; 6D] adapted to receive the upper shoe portion, the base defining an upper surface [6b, e.g.] capable of receiving the foot and a lower surface [6a, e.g.] capable of mounting the load-bearing surface [2], the base defining a ventilation channel [8; 8B; 8C; 8D] at least partially traversing the upper surface of the base from an inlet aperture to an outlet aperture, the inlet and outlet apertures being defined on an exterior of the base to provide ambient airflow into and out of the base from the exterior of the base during use; and

a substrate [9C] received within the upper shoe portion on the upper surface of the base and including a plurality of moisture transport pathways [12] therethrough wherein air flow can flow from the inlet aperture, through the ventilation channel [8; 8B; 8C; 8D], and out the outlet aperture [19], drawing moisture from the foot through the moisture transport pathways.

24. [Patent Claim 34] A ventilated sport shoe [4/5; 4A/5A; 5B; 5C; 5D] capable of being mounted on a lower frame [2] mounting a bearing member [3], wherein the ventilated sport shoe comprises:

an upper shoe portion [4/5; 4A/5A; 5B; 5C; 5D] defining an interior adapted to receive a foot; and

a foot bed including a base [6; 6A; 6B; 6C; 6D] secured to the upper shoe portion, the foot bed defining an upper surface [6b, e.g.] capable of receiving the foot and the base defining a lower surface [6a, e.g.] capable of mounting the lower frame [2] thereon, the foot bed defining a ventilation channel [8; 8B; 8C; 8D] formed within or below the upper surface of the foot bed and at least partially traversing the foot bed from an inlet aperture [11; 11A; 11B; 11C; 11D] defined on an exterior of the base to an outlet aperture [19] defined on the exterior of the base, the apertures providing airflow into and out of the foot bed during use, wherein the ventilation channel is in moisture transport communication [via holes 12, e.g.] with the interior of the upper shoe portion, thereby providing a ventilation and moisture transfer from the received foot to the channel and out the outlet aperture, wherein the lower surface of the base [6; 6A; 6B; 6C; 6D] defines a projection projecting downwardly from the lower surface, the inlet ventilation aperture [11; 11A; 11B; 11C; 11D] being defined within the projection.

25. [Patent Claim 35] The ventilated sport shoe of claim 24, wherein the inlet ventilation aperture is disposed on a forward face of the projection [see, e.g., Figs. 1, 5, and 6-9], such that the forward face is oriented towards a toe portion of the base.